

**REMARKS**

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks. The foregoing amendments are made to clarify the claims, and full support is provided by the original claims, and throughout the specification, and specifically on page 13, line 25 – page 14, line 11 for the amendment to claim 9. No new matter is added.

***Objection to the Claims***

At page 3 of the Office Action, Claim 5 was objected to because it allegedly has no conjunction joining the second occurrence of parts a) and b). Claim 5 has been amended to insert “and” between the second occurrence of parts a) and b) as requested by the Examiner. For at least the foregoing reasons, Applicants respectfully submit that Claim 5 is not objectionable, and therefore respectfully request withdrawal of the objection thereto.

***Rejection under 35 U.S.C. § 112, second paragraph***

In the Office Action, beginning at page 3, Claims 1-2, 5, 7-10, 12-13, 16-17, 20-21, and 26-31 were rejected under 35 U.S.C. § 112, second paragraph, as reciting subject matters that allegedly are indefinite. Applicants respectfully request reconsideration of this rejection.

In paragraph 9[a] of the Office Action, claims 1, 5, and 7, and all those that depend thereon, were rejected because the use of the transition phrase “comprising” encompasses sequences on either end of the specified sequence. The interpretation by the Examiner is correct, in that there may nucleotides on either side of the recited DNA. This is a well-established legal principle in the interpretation of transition phrases. However, merely because those additional nucleotides are not specified does not render the claims

indefinite. It is very clear that such DNA species can encompass any sequences on either side of the recited sequence; however, the other limitations of the claims must also be met, which actually limits the DNA species encompassed by the claims.

Regarding the rejections set forth in paragraph 9[b] and 9[c] of the Office Action, the claims have been amended as suggested by the Examiner.

Regarding the rejection set forth in paragraph 9[d], the term “inversion” has been deleted.

Regarding the rejection set forth in paragraph 9[e], claim 9 has been amended to clarify the meaning.

For at least the foregoing reasons, Applicants respectfully submit that Claims 1-2, 5, 7-10, 12-13, 16-17, 20-21, and 26-31 fully comply with 35 U.S.C. § 112, second paragraph, and therefore respectfully request withdrawal of the rejection thereof under 35 U.S.C. § 112.

***Rejection under 35 U.S.C. § 112, first paragraph***

In the Office Action, beginning at page 6, Claims 1-2, 5, 7-10, 12-13, 16-17, 20-21, and 26-31 were rejected under 35 U.S.C. § 112, first paragraph, maintaining the written description rejection from the previous Office Action. Applicants respectfully request reconsideration of this rejection.

With regard to the comments on page 7 of the Office Action regarding claims 16 and 20, these claims have been amended to change the article preceeding the “amino acid sequence” from “an” to “the”. Therefore, for example, claim 16 recites in section (B) that the protein must comprise *the* amino acid sequence of SEQ ID No. 6, which cannot be interpreted as having possibly only two amino acids of SEQ ID No. 6. For these reasons, the claimed invention is adequately described.

At the paragraph beginning at the bottom of page 7 of the Office Action, the Examiner has maintained his position regarding the allegedly inadequate description of

the methods for enhancing the activities of various proteins. It is maintained that the three well-described methods in the specification, all of which are also well-known and regularly practiced in the art, are sufficient to describe the genus of methods for enhancing activities of proteins as claimed. It appears that the Examiner is requiring a description of all possible methods, which is clearly an incorrect standard. Three methods are clearly sufficient to describe the genus of possible methods, since description of all possible methods is not required. Furthermore, the 3 described methods are sufficiently divergent in their implementation to demonstrate that Applicants were in possession of the claimed genus of methods.

For at least the foregoing reasons, Applicants respectfully submit that Claims 1-2, 5, 7-10, 12-13, 16-17, 20-21, and 26-31 fully comply with 35 U.S.C. § 112, first paragraph (written description), and therefore respectfully request withdrawal of the rejection thereof under 35 U.S.C. § 112.

In the Office Action, beginning at page 9, Claims 1-2, 5, 7-10, 12-13, 16-17, 20-21, and 26-31 were rejected under 35 U.S.C. § 112, first paragraph, maintaining the scope of enablement rejection from the previous Office Action. Applicants respectfully request reconsideration of this rejection.

With regard to the comments on page 10 of the Office Action regarding claims 16 and 20, as explained above, these claims have been amended to change the article preceeding the “amino acid sequence” from “an” to “the”. Therefore, for example, claim 16 recites in section (B) that the protein must comprise *the* amino acid sequence of SEQ ID No. 6, which cannot be interpreted as having possibly only two amino acids of SEQ ID No. 6. For these reasons, the claimed invention is adequately enabled, and only routine experimentation is required to make the full scope of the claimed invention.

At the paragraph beginning at the bottom of page 10 of the Office Action, the Examiner has maintained his position that the specification allegedly fails to enable the

methods for enhancing the activities of various proteins. It is maintained that the three methods set forth in the specification, all of which are also well-known and regularly practiced in the art, are sufficient to enable the genus of methods for enhancing activities of proteins as claimed. It appears that the Examiner is requiring the disclosure in the specification of all possible methods for the claims to be sufficiently enabled, which is clearly an incorrect standard. Three methods is clearly sufficient to enable the genus of possible methods, since explicit disclosure of all possible methods is not required. Furthermore, the 3 described methods are sufficiently divergent in their implementation to demonstrate that one of ordinary skill in the art could practice the claimed methods to their full scope in *M. methylotrophus* without undue experimentation.

For at least the foregoing reasons, Applicants respectfully submit that Claims 1-2, 5, 7-10, 12-13, 16-17, 20-21, and 26-31 fully comply with 35 U.S.C. § 112, first paragraph (enablement), and therefore respectfully request withdrawal of the rejection thereof under 35 U.S.C. § 112.

***Rejection under 35 U.S.C. § 102***

In the Office Action, beginning at page 12, Claims 16 and 20 were rejected under 35 U.S.C. § 102, as reciting subject matters that allegedly are anticipated by Kojima et al. (WO95/16042). Applicants respectfully request reconsideration of this rejection.

The interpretation of the claims is not longer applicable, in light of the amendments to the claims, as explained above.

For at least the foregoing reasons, Applicants respectfully submit that the subject matters of Claims 16 and 20 are not anticipated by Kojima et al., are therefore not unpatentable under 35 U.S.C. § 102, and therefore respectfully request withdrawal of the rejection thereof under 35 U.S.C. § 102.

***Conclusion***

For at least the foregoing reasons, Applicants respectfully submit that the present patent application is in condition for allowance. An early indication of the allowability of the present patent application is therefore respectfully solicited.

If Examiner Steadman believes that a telephone conference with the undersigned would expedite passage of the present patent application to issue, he is invited to call on the number below.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the undersigned respectfully requests that our deposit account 50-2821 be charged any required fees, and/or be credited with any overpayments.

Respectfully submitted,

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